

course, weak tea, cocoa, afe au lait, and buttermilk are included in this dietary.

In addition to the above, a mixed diet is to be employed. The nitrogenous food should be distributed throughout the day, being guided in its administration by the symptoms of the patient and by the pulse (i. e. blood pressure). Meats are allowed, usually, once a day. In the past, white meats and fish have been always preferred, but of late, it has been claimed, that red meats were no more harmful than the others. Beef, especially boiled, certainly contains less extractives than the ordinarily prepared white meat. Bacon, ham, tongue, etc., may be given, whereas, brains, liver, kidney, and spleen, should preferably be omitted from the dietary.

Eggs require no special mention. They are classed as a light variety of nitrogenous food. Two or three a day may safely be consumed.

Butter, cream, oil, cereals, and farinaceous foods, gelatins, fruit jellies, and practically every kind of fruit are allowed. Of the vegetables, radishes, horse-radish, and perhaps onions and celery should be forbidden. Asparagus in moderate amounts is not harmful. Condiments, spices, pickles, fried food, rich sauces, meat soups, and meat extracts should certainly be avoided. Sweets should be sparingly eaten, chiefly on account of the danger of digestive disturbances.

In closing, I would warn against trying to make any one man's special diet, fit every case of chronic Bright's. In each individual case, we must feel our way; we must be guided by the nutrition, the state of the patient, all of which are more important than the albuminuria, which always increases on changing from one diet to another, and which at the best, varies but slightly, when one considers, in grams, the amount of albumin eliminated.

BIBLIOGRAPHY.

- La Cure de Dechloruration. (Les Actualites Medicales.) F. Vidal et A. Javal. Paris, 1906.
 Die diätetische Behandlung der Nierenentzündungen. (Ergebnisse der Inneren Medizin und Kinderheilkunde, Bd. IV, 1909).
 Nephritis. (Disorders of Metabolism and Nutrition.) Von Noorden, 1907.
 Handbuch der Pathologie des Stoffwechsels. Von Noorden, 1907.
 Diätbehandlung innerer Krankheiten. H. Strauss, 1908.
 The Problems of Experimental Nephritis. (Archives Internal Medicine.) R. M. Pearce, Feb., 1910.

Other references to the experimental side of the question are omitted, being included in the paper dealing particularly with that question.

Discussion.

Dr. G. L. Eaton, San Francisco: In relation to the hemorrhagic conditions found in interstitial nephritis, it is a question whether or not, if these conditions were permitted to exist long enough, there would be a pathological involvement of the kidney. We know that in hypernephroma with hemorrhage long after the nephritis, will be followed by a growth in the kidney. I had a case about eight years ago where there was a hematuria which was periodical about every six months but at the end of eight years it had ceased. Upon careful observation and catheterization and X-ray, a tumor was noticed in the region of the kidney which was found to be some hypernephroma. Was that interstitial condition a forerunner of the hypernephroma? There is no doubt but what infection had a tendency to produce an interstitial nephritis of unilateral origin. I could state a case which would bear this out.

PELLAGRA; WITH DEMONSTRATION OF A CASE.*

By W. A. CLARK, M. D., San Leandro.

In this paper I shall only endeavor to present very briefly, for those who may not be very familiar with the disease, the salient points of pellagra, and if interested, ask you to take up the time allotted in the examination of this patient, rather than consuming it by giving you what you may obtain as I have done, from the literature.

The disease has been particularly prevalent in Italy, the first description being given in 1735. In 1863 the first cases were reported in the United States.

It is endemic, and is neither contagious, infectious nor inherited. It affects both sexes, any age, and particularly those who labor in the fields.

That damaged corn, as the chief etiological factor in the production of the disease, is asserted and as warmly disputed, it seems probable that the cause of the disease is unknown, except that an unhealthy condition of the mouth and teeth may allow the entrance of the specific poison.

The symptoms are as numerous as inconstant, except the skin manifestations, which are the local expression of a systemic disorder and, in the terminal stage, there is oposthophonos, and occasional temperature.

The prodromal symptoms are languor, general malaise, epigastric pain, diarrhea or constipation, loss of appetite and vertigo. The tongue may become coated or reddened and papillæ prominent, and there may be a loss of membrane, and even ulceration. The papillæ sometimes become the seat of bluish-black pigmentation. The cutaneous lesions usually develop quite suddenly in the early Spring, and occasionally without previous warning. The eruption is usually symmetrical and confined to those portions of the body exposed to the sun. The face and ears may be affected simultaneously and there is usually a collar of pigmentation around the neck, except where the chin shades it. If shoes are not worn, the dorsal surfaces of the feet are affected, missing the heels, giving what is called a "bootleg" appearance. The backs of the hands usually express the typical expression of the disease. The eruption at first is erythematous, spreading from the radial to the ulnar side, the palms being seldom affected. There is usually a sharp line of demarkation at the wrist and the second joint of the fingers. At first the color is dull and red not unlike a sunburn, and indeed I can recollect several of these patients before the disease was called to my attention by Dr. Blue, whom I thought suffered very severely from mere sunburn. The skin is swollen and a burning rather than an itching sensation is felt. The color deepens and does not disappear on pressure, and soon becomes a chocolate or sepia shade. The erythema disappears in about two weeks, with exfoliation. The eruption may become vesicular or even bullous followed by desiccation and crusts. The attack fades, leaving the skin permanently pigmented, thickened, and roughened, a condition readily distinguished at post mortem. The symptoms disap-

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pear and the patient is comparatively well until the following spring which ushers in another attack. In these succeeding attacks the erythema usually is not so severe yet the permanent changes become more marked. The gastro-intestinal and mental symptoms becoming more severe. The increase in the salivary secretion and gastro-intestinal symptoms being particularly marked. Melancholia or dementia develop and the patient, after an unhappy existence, develops opothotonos, and he dies from exhaustion.

I have made no attempt to go into the differential diagnosis, the nervous phenomena as the result of chord degeneration, the morbid anatomy nor the treatment, as these points are exhaustively treated in our text books, and particularly in a recent article, with excellent illustrations, by Hyde. If this brief description will increase your pleasure in examining this patient, I shall indeed be grateful.

Discussion.

Dr. H. D'Arcy Power, San Francisco: The only thing which I desire to say is that I am more and more impressed, the more I have seen of actual cases recently, with the idea that we have all had these cases before us many times without recognizing them. From the time I saw the first case exhibited by Dr. Blue, it has been easy for me to go back in my mind over my past records and recall at least 2 cases, which were undoubtedly cases of pellagra, of whose nature I then had no idea. I am quite sure that if we all pay attention to cases now under our observation we will find many of these cases. I am pretty sure that pellagra is not such a recent importation as some imagine. Another point of which I wish to speak is the importance of getting more knowledge than we have in regard to its etiology. There is much in the general character of the distribution of pellagra to suggest that the fundamental trouble is in the nervous system, that it is a neurosis finding its expression in lesions of the skin and mucosa. Until we know more concerning the nature and mode of action of the poison we have no chance of dealing with it therapeutically. The first thing of importance, then, is that we all learn as much as possible of the disease with a view of its better recognition and secondly to learn more concerning the etiology with the view of finding the right treatment.

Dr. Creighton Wellman, Oakland: I have examined both the cases presented by Dr. Clark. One is without question a case of pellagra although the eruption is far from typical—it lacks the classical sharpness of outline. The line of demarcation should be definite where the sleeve ends and above the collar bands. I think that the matter of eruption in these cases has been emphasized too much. It is one of the minor characteristics of the disease. All of the symptoms in all the textbooks have been printed under the description of pellagra but the details of the symptom complex are not always important. You have the general nervous condition which simulates very closely general paralysis of the insane. You have also the denuded condition of the intestinal tract from the mouth to the anus. The symptoms accompanying this condition can be imagined. The stools are rather characteristic, of markedly foul odor and of a peculiar greenish yellow color. A striking thing is the denudation of the buccal surfaces, the so-called cardinal tongue, etc.

Dr. W. A. Clark, San Leandro: As to the etiology of pellagra, we know nothing definitely as yet. Most authorities lean toward maize in corn eating countries. Whether some specific organism is the cause, I do not know. The skin lesion in these cases is possibly the least important thing which we have to consider. The gastrointestinal and nervous symptoms are the predominating ones. Another important fact

is the mental condition of these patients. This man, who undoubtedly has pellagra, was received in our wards as a melancholic—which is probably the final expression of the disease. In looking back over the period of time during which I have been at the County Hospital, I remember several of these cases of low mentality showing the expression of a disease such as this. I could never understand why it was that these people during the spring months were subject to such severe types of sunburn. I am under the impression now that these must have been cases of pellagra. In the second case which I showed, which is only a border line case, the arteries are quite good, the heart is quite good and the nervous symptoms are the most pronounced. The absence of the superficial and deep reflexes cannot be explained quite satisfactorily unless the man has pellagra. Those of us who have charge of the county hospitals and asylums may be able to look back over some of our cases of melancholia, and now diagnose them as pellagra. I have no doubt but that the friends and relatives of these so-called melancholic patients, who have been discharged, have accused us of abusing these patients, judging from the looks of the skin lesions. An interesting and important feature is that these skin lesions do not disappear after death.

HISTORY OF RABIES IN SOUTHERN CALIFORNIA.

By STANLEY P. BLACK, M. D., and L. M. POWERS, M. D., Los Angeles.

There is no disease, perhaps, in which the public mind is so beclouded as with that of hydrophobia. The general public often denies the existence of the disease and even among the profession we have seen doctors who say they never saw a case of rabies, and who state therefore it does not exist. Rabies is a disease which affects many animals, most commonly dogs, and more rarely the human being, but Drs. Kerr and Stimson in their paper read before the American Medical Association, had collected 111 human deaths from hydrophobia in 1908. Every dog which bites an individual is not a rabid dog. It may be angry but not hydrophobic. On the other hand a large proportion of the hydrophobic dogs are unable to bite. We have the disease in the dog in two forms. First and most common the dumb variety, in which the lower jaw is paralyzed. The dog is usually quite nervous, oftentimes very affectionate, but the drop of the lower jaw is quite characteristic. In the other variety we have the furious type in which the dog will bite anything coming in his way. He rarely fights, but bites and passes on. Before the days of the modern diagnosis of hydrophobia, the large proportion of cases of rabies was diagnosed from autopsy, opening the stomach and finding it full of sticks and stones. For the past few years we have been using the microscope in the study of rabies, finding in the brain within the cells of the Hippocampus or Ammon's Horn and in other parts of the brain, the Negri bodies. These bodies as shown here under

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